INSTALLATION GUIDE

AXIS A1001 Network Door Controller

Liability

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Intellectual Property Rights

Axis AB has intellectual property rights relating to technology embodied in the product described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the patents listed at http://www.axis.com/patent.htm and one or more additional patents or pending patent applications in the US and other countries.

Equipment Modifications

This equipment must be installed and used in strict accordance with the instructions given in the user documentation. This equipment contains no user-serviceable components. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.

System Considerations

The Axis product shall be installed within the secured area.

The Axis product, whether it is a standalone door controller or a system of door controllers, shall not impair the intended operation of the panic hardware used in conjunction with it. The Axis product should be installed on a wall (preferred) or a ceiling, with or without a junction box. It can also be installed on a DIN rail.

Trademark Acknowledgments

AXIS COMMUNICATIONS, AXIS, ETRAX, ARTPEC and VAPIX are registered trademarks or trademark applications of Axis AB in various jurisdictions. All other company names and products are trademarks or registered trademarks of their respective companies.

Support

Should you require any technical assistance, please contact your Axis reseller. If your questions cannot be answered immediately, your reseller will forward your queries through the appropriate channels to ensure a rapid response. If you are connected to the Internet, you can:

- download user documentation and software updates
- find answers to resolved problems in the FAQ database. Search by product, category, or phrase
- report problems to Axis support staff by logging in to your private support area
- chat with Axis support staff (selected countries only)
- visit Axis Support at www.axis.com/techsup/

Learn More!

Visit Axis learning center www.axis.com/academy/ for useful trainings, webinars, tutorials and guides.

Regulatory Information

Europe

CE This product complies with the applicable CE marking directives and harmonized standards:

- Electromagnetic Compatibility (EMC) Directive 2004/108/EC. See Electromagnetic Compatibility (EMC).
- Low Voltage (LVD) Directive 2006/95/EC. See Safety.
- Restrictions of Hazardous Substances (RoHS) Directive 2011/65/EU. See Disposal and Recycling.

A copy of the original declaration of conformity may be obtained from Axis Communications AB. See *Contact Information,* on page 3.

Electromagnetic Compatibility (EMC)

This equipment has been designed and tested to fulfill applicable standards for:

- Radio frequency emission when installed according to the instructions and used in its intended environment.
- Immunity to electrical and electromagnetic phenomena when installed according to the instructions and used in its intended environment.

USA

This equipment has been tested using a shielded network cable (STP) and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canada

This Class B digital apparatus complies with Canadian ICES-003.

Europe

This digital equipment fulfills the requirements for RF emission according to the Class B limit of EN 55022.
This product fulfills the requirements for immunity according to EN 61000-6-1 residential, commercial and light-industrial environments.
This product fulfills the requirements for immunity according to EN 61000-6-2 industrial environments.
This product fulfills the requirements for immunity according to EN 55024 office and commercial environments.
This product fulfills the requirements for immunity according to EN 50130-4 residential, commercial, light-industrial and industrial environments.

Australia/New Zealand

This digital equipment fulfills the requirements for RF emission according to the Class B limit of AS/NZS CISPR 22.

Japan – この装置は、クラスB 情報技術装置です。この装置は、家庭環境で使用することを目 的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、 受信障害を引き起こすことがあります。 取扱説明書に従って正しい取り扱いをして下さい。

Safety

This product complies with IEC/EN/UL 60950-1, Safety of Information Technology Equipment.
The power supply used with this product shall fulfill the requirements for Safety Extra Low Voltage (SELV) and Limited Power Source (LPS) to IEC/EN/UL 60950-1.
When used in systems that require UL certification, the product shall be powered by a UL 294-listed or UL 603-listed Class 2 low-voltage power limited power supply.

Disposal and Recycling

Europe

This symbol means that the product shall not be disposed of together with household or commercial waste. Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) is applicable in the European Union member states. To prevent potential harm to human health and the environment, the product must be disposed of in an approved and environmentally safe recycling process. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. Businesses should contact the product supplier for information about how to dispose of this product correctly. This product complies with the requirements of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

China

This product complies with the requirements of the legislative act Administration on the Control of Pollution Caused by Electronic Information Products (ACPEIP).

Contact Information

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Fax: +46 46 13 61 30
www.axis.com

Safety Information

Read through this Installation Guide carefully before installing the product. Keep the Installation Guide for future reference.

Hazard Levels

Read through this Installation Guide carefully before installing the Axis product. Keep the Installation Guide for further reference.

⚠DANGER
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠CAUTION
Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE
Indicates a situation which, if not avoided, could result in damage to property.

Other Message Levels

Important
Indicates significant information which is essential for the product to function correctly.

Note
Indicates useful information which helps in getting the most out of the product.

Safety Instructions

⚠WARNING

The Axis product shall be installed by a trained professional.

⚠CAUTION

- Never mount or make connections to the Axis product while power is applied to the product. Always apply power at the end of the installation.

NOTICE

- The Axis product shall be used in compliance with local laws and regulations.
- To use the Axis product outdoors, or in similar environments, it shall be installed in an approved outdoor housing.
- Store the Axis product in a dry and ventilated environment.
- Avoid exposing the Axis product to vibration, shocks or heavy pressure.
- Do not install the product on unstable or vibrating brackets, surfaces or walls.
- Use only applicable tools when installing the Axis product. Excessive force could cause damage to the product.
- Do not use chemicals, caustic agents, or aerosol cleaners. Use a damp cloth for cleaning.
- Use only accessories that comply with technical specification of the product. These can be provided by Axis or a third party.
- Use only spare parts provided by or recommended by Axis.
- Do not attempt to repair the product by yourself. Contact Axis support or your Axis reseller for service matters.
- The product shall be connected using a shielded network cable (STP). All cables connecting the product to the network switch shall be shielded (STP) and intended for their specific use. Make sure that the network switch is properly grounded. For information about regulatory requirements, see *Regulatory Information,* on page 2.
- Use a Safety Extra Low Voltage (SELV) compliant limited power source (LPS) with either a rated output power limited to ≤100 W or a rated output current limited to ≤5 A.
- Each wire shall have an area that corresponds to AWG 28–16 (CSA) or AWG 30–14 (CUL/UL). Select cables in compliance with your local regulations.
- To allow for future maintenance, to avoid excessive strain on wires and connectors, and to avoid damage to conductor insulation, leave a service loop and make sure all cables and wires are properly supported and secured. Use the supplied cable ties.
- Make sure all the wires are connected correctly. Incorrect wiring could cause damage to the product.
- To protect the circuits against electrostatic discharge (ESD), use ESD protection when handling the product while the components and contacts are exposed.
- If using Power over Ethernet, wait with connecting the network cable to the network until the all the other wires have been connected.
- If installing the door controller on a wall, make sure the cut-out for the cables is facing downwards.

Important

- The recommended maximum RS485 cable length is 30 m (98.4 ft).
- Before installing the product, connect the product to the network and configure the hardware in the product's

hardware configuration pages. Use the generated hardware pin chart. Make sure the product is disconnected from power (PoE/DC) while connecting devices to the product.

Note

- For information about how to connect other wires, such as power wires to locks, readers and other devices, see the manufacturers' instructions.

Transportation

NOTICE

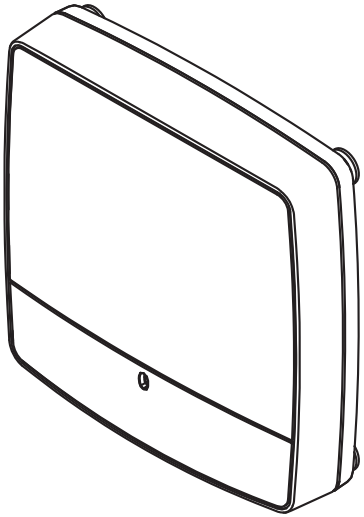
- When transporting the Axis product, use the original packaging or equivalent to prevent damage to the product.

Battery

The Axis product uses a 3.0 V CR2032 lithium battery as the power supply for its internal real-time clock (RTC). Under normal conditions this battery will last for a minimum of five years.
Low battery power affects the operation of the RTC, causing it to reset at every power-up. A log message will appear when the battery needs replacing.
The battery should not be replaced unless required, but if the battery does need replacing, contact Axis support at www.axis.com/techsup/ for assistance.

⚠WARNING

- Risk of explosion if the battery is incorrectly replaced.
- Replace only with an identical battery or a battery which is recommended by Axis.
- Dispose of used batteries according to local regulations or the battery manufacturer's instructions.



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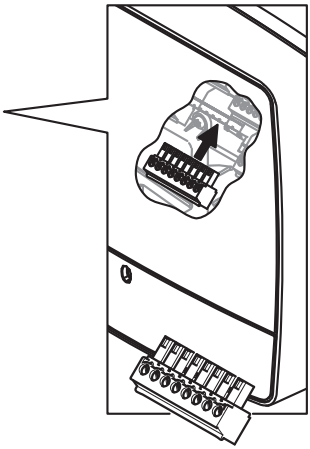
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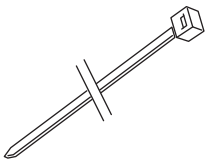

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AXIS
Owner Authentication Key
Label here

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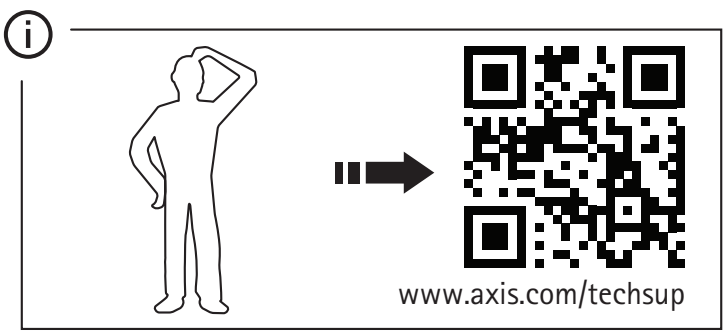
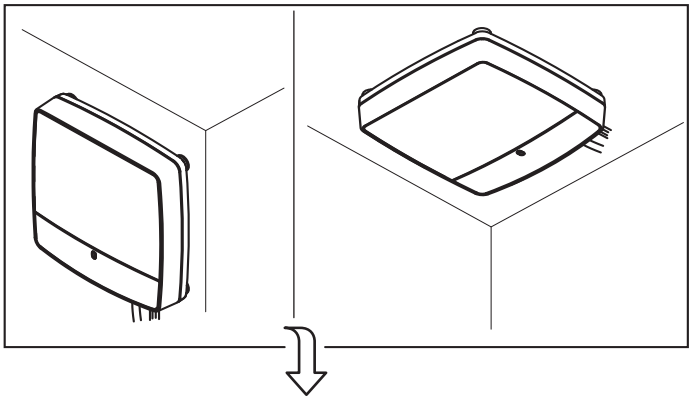
AXIS XXXXX XXHZ
P/N: XXXX-XXX-XX
S/N: XXXXXXXXXXXX
IPXX
Engineered in Sweden
Made in XXXXX

2x


www.axis.com/techsup



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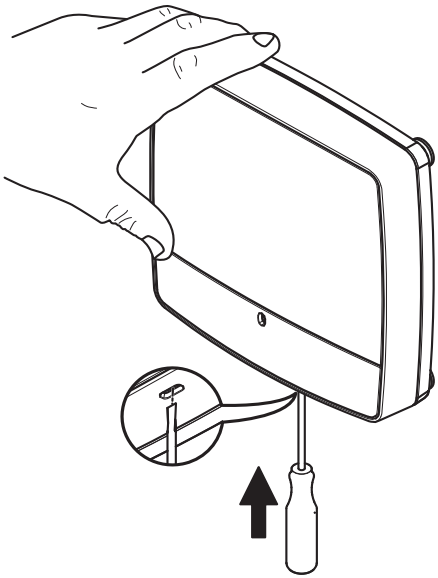

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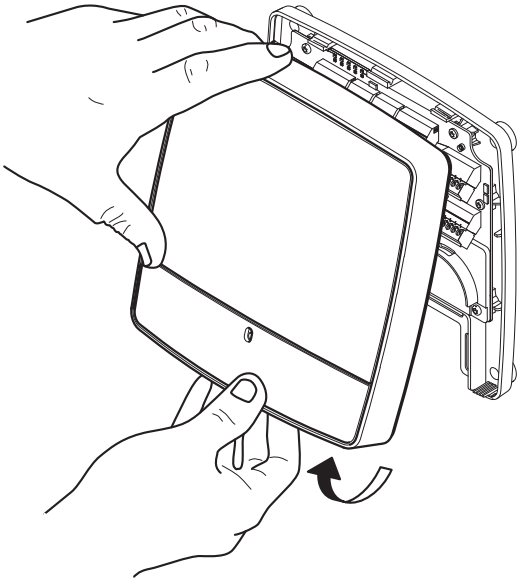

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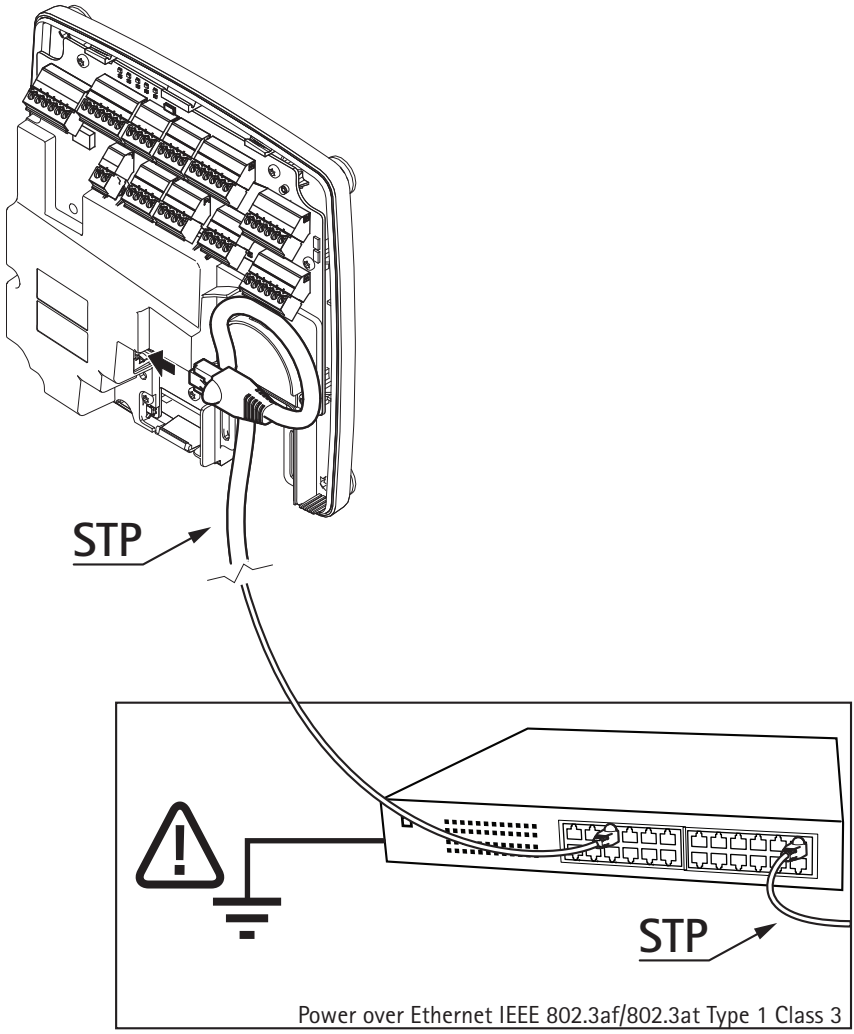

Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3

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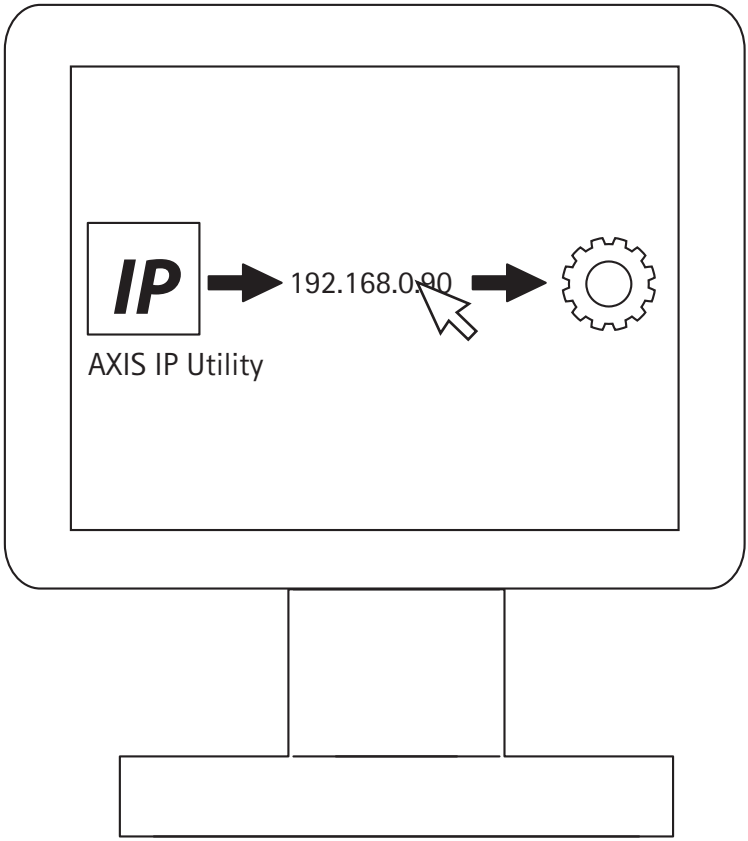

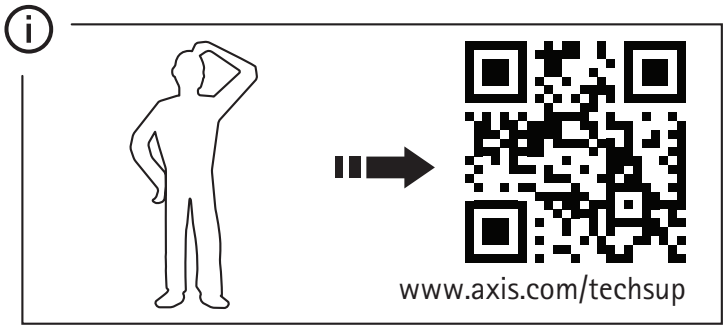

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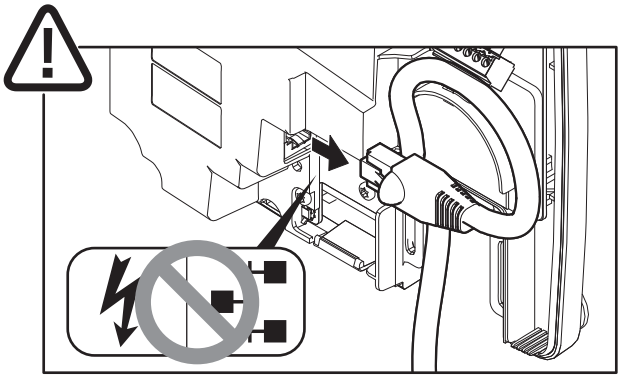

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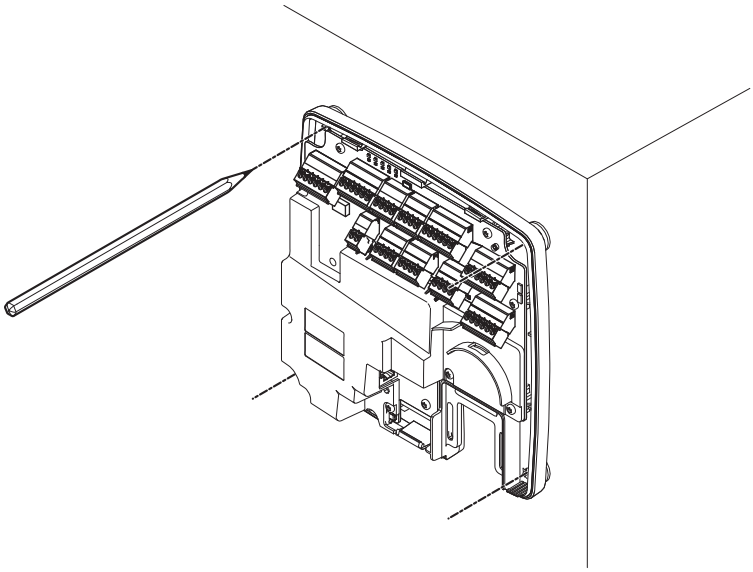

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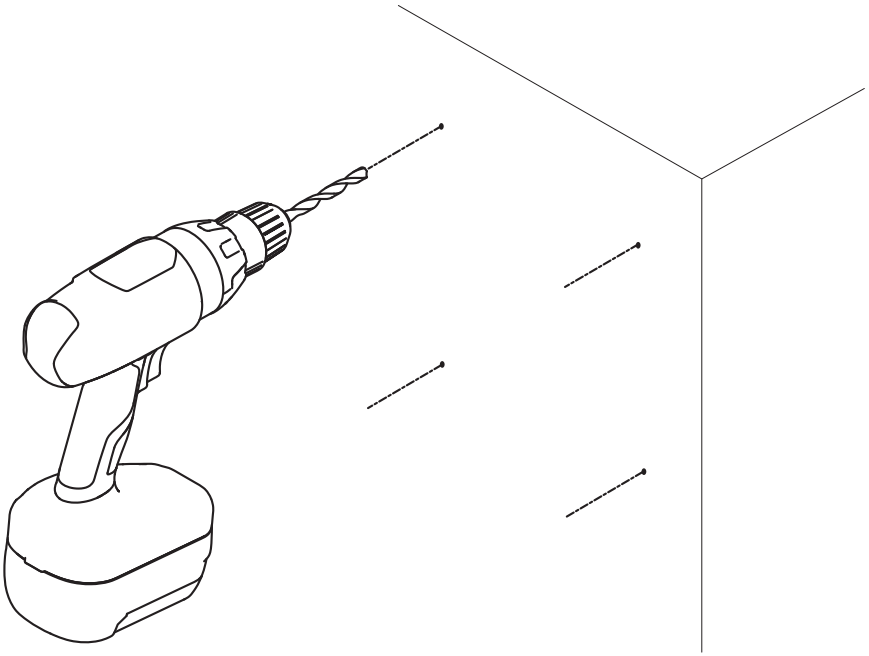

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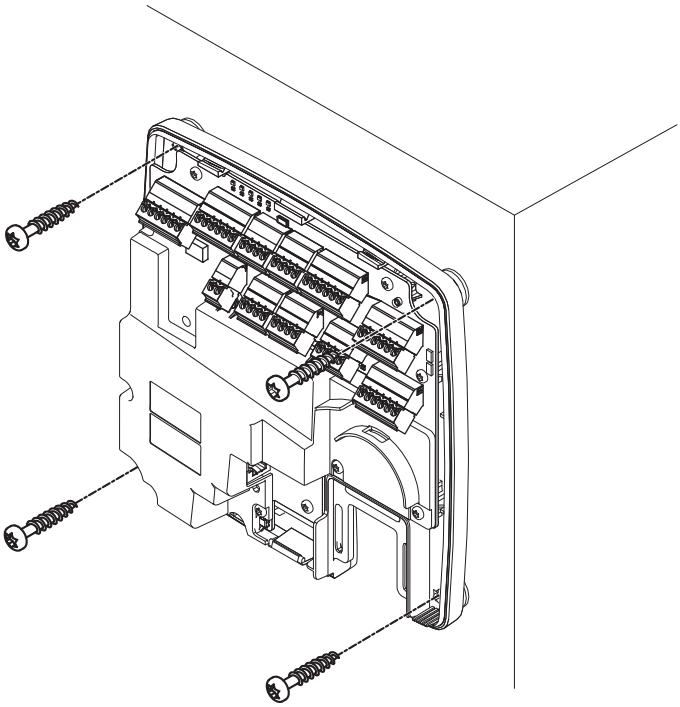

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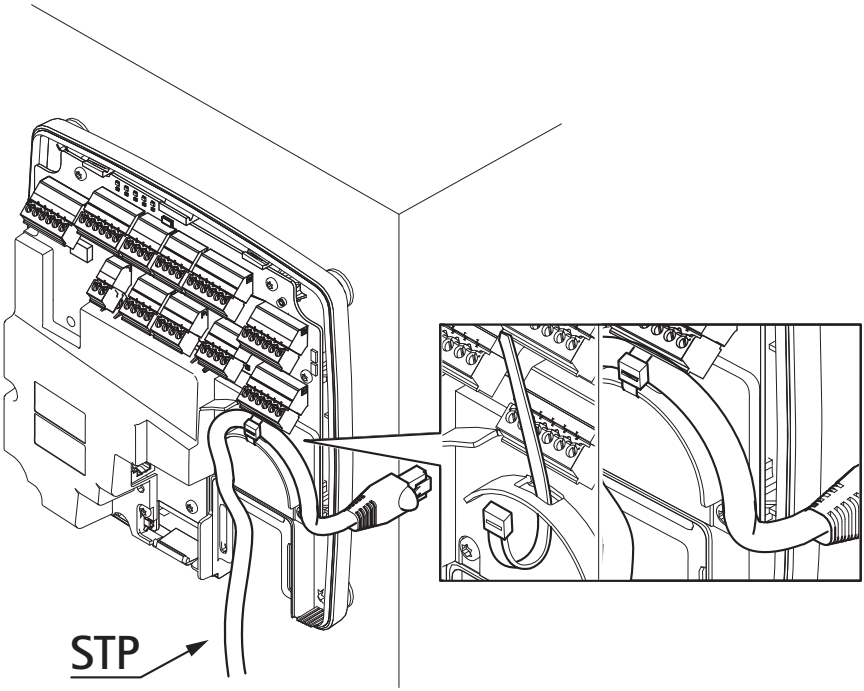

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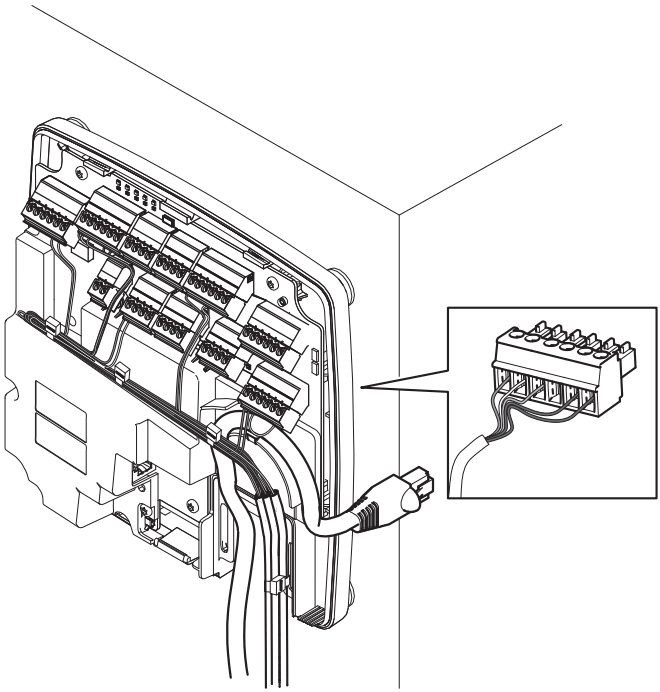
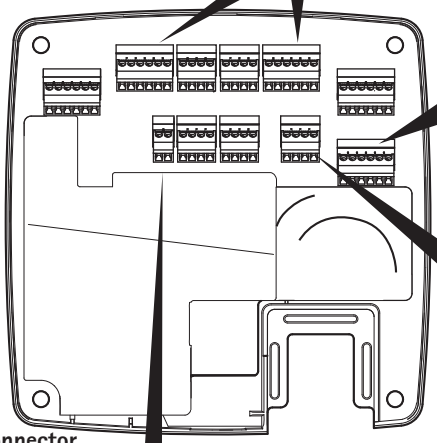


Reader I/O connectors
DC output: 12 V DC, max 300 mA
2x 4 configurable inputs/outputs:
Digital input: 0 to max 40 V DC
Digital output: 0 to max 40 V DC, open drain, 100 mA
READER I/O 1 &2

AWG 28–16 (CSA)
AWG 30–14 (CUL/UL)

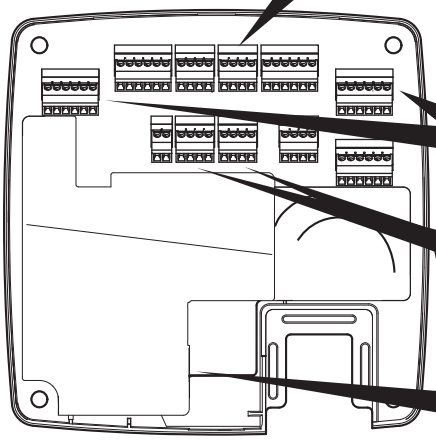


Power & Relay connector
DC output: 12 V DC, max 500 mA
Relay: 30 V DC, max 700 mA
RELAY & PWR

Power lock connector
2x 12 V DC
0 V DC, floating, or 12 V DC, max total load: 500 mA
LOCK

Power connector
DC input: 10–30 V DC, max 26 W
Max load on outputs: 14 W
DC IN

Auxiliary connector
DC output: 3.3 V DC, max 100 mA
Digital input: 0 to max 40 V DC;
Digital output: 0 to max 40 V DC, open drain, 100 mA
AUX



Reader data connectors
Max cable length: 30 m (98.4 ft)
RS485 full duplex
RS485 half duplex
Wiegand
READER DATA 1 & 2

Door connectors
Digital input: 0 to max 40 V DC
DOOR IN 1 &2

Network Connector
RJ45, PoE IEEE 802.3af/ 802.3at Type 1 Class 3
Max load on outputs: 7.5 W

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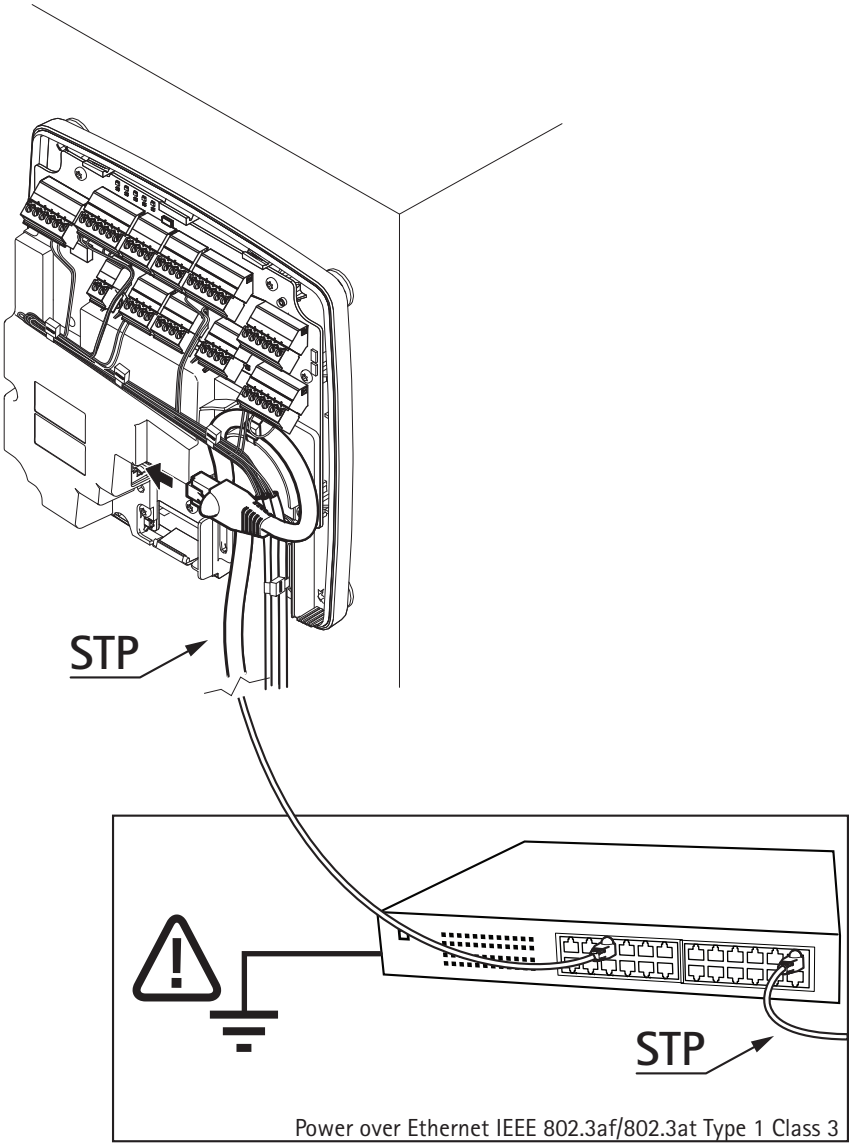

Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3

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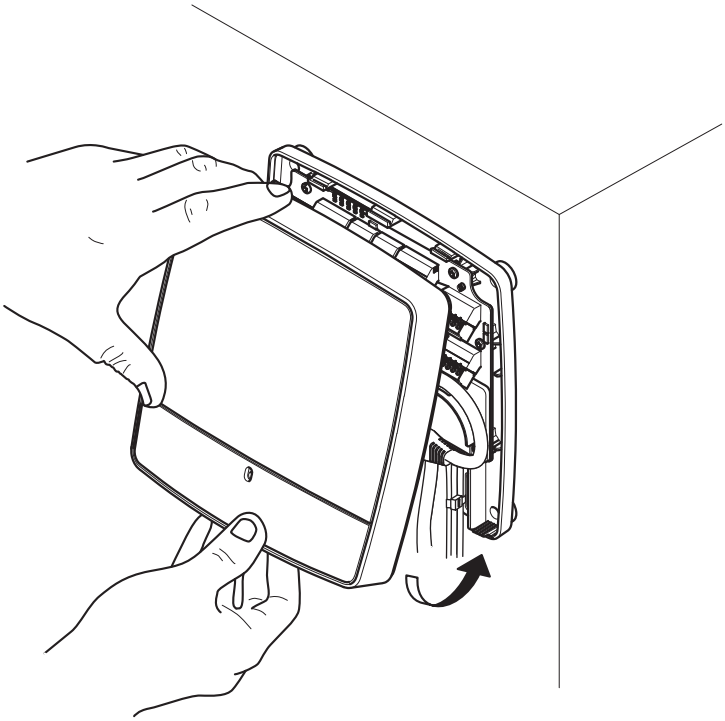

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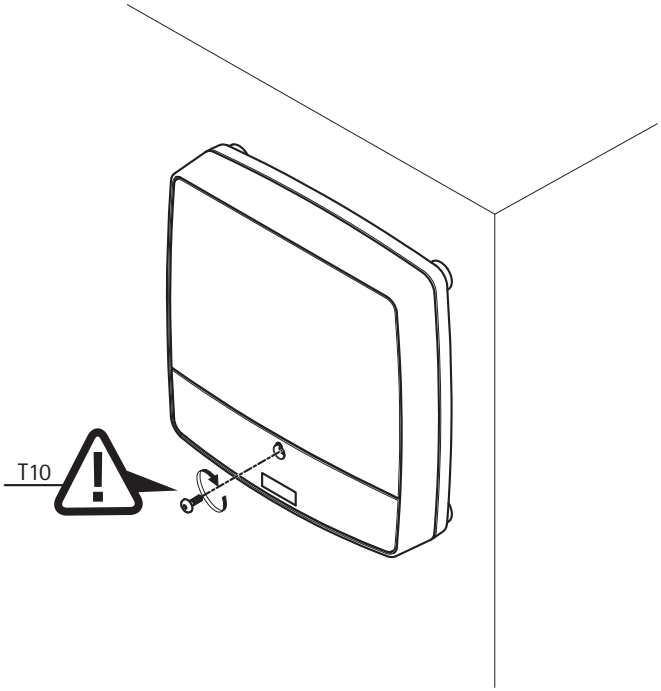

www.axis.com/warranty

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